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EXAMINER

KOLLIAS, ALEXANDER C

ART UNIT

PAPER NUMBER

1796

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/532,597	Applicant(s) PLACHETTA ET AL.	
	Examiner ALEXANDER C. KOLLIAS	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5 and 7-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5 and 7-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. All outstanding objections and rejections, except for those maintained below, are withdrawn in light of applicant's amendment filed on 6/3/2009.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
3. The new grounds of rejection set forth below are necessitated by applicant's amendment filed on 6/3/2009. In particular, claim 5 has been amended to recite new limitations. Specifically claim 5 has been amended to recite that the amount of titanium dioxide range from 1 to 50 % and the titanium dioxide pigments have a mean average particle size of less than 1.2 microns. Furthermore, newly added claims 13, 16-18, and 19-20 recite limitations from the Specification not previously presented. Thus, the following action is properly made final.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
5. Claims 1-2, 4-5, and 7-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the

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relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

6. Claim 1 recites the limitation “wherein an average pressure build-up of the polymerized product is about 7 bar/kg”. However, Page 13 of the Specification discloses that the average pressure of the polymerized product is about 7 bar/kg for utilizing a specific composition comprising, water, dispersing assistant, titanium dioxide, and caprolactam which is processed by specific process steps as disclosed in Inventive Examples 1 and 2 and not for a generic composition comprising polymerized polycaprolactam and titanium dioxide as a generic method as presently claimed.

7. Claim 17 recites that the polyamide comprises 9.3 % by weight water, 6.0 wt % caprolactam, and 0.2 wt % dispersant. However, it is noted that while the Specification discloses that dispersants may comprise 0.1 to 1.0 % on Page 9 Lines 23024, and while particular embodiments (Inventive Example 1) disclose a mixture comprising 93.8 wt % water, 6.0 wt % caprolactam and 0.2 wt % of dispersant, it is noted that the particular Example discloses a specific dispersant, i.e. one known under the tradename SOKALAN PA 20 PN and specific titanium dioxide known under the tradename HOBITAN LOCR-SM. Therefore for while the Specification discloses a particular embodiment comprising specific titanium dioxide and dispersing agents, in specific amounts, there is no support in the Specification for the 0.2 wt % of a generic dispersing agent as presently recited in claim 17.

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8. Claim 18 recites the limitation “wherein an average mean pressure build-up of the polymerized product, determined as a difference between a final pressure and an initial pressure upstream during a filtration, divided by an amount put through a filter is about 7 bar/kg”.

However, Page 13 of the Specification discloses that the average pressure of the polymerized product is about 7 bar/kg for utilizing a specific composition comprising, water, dispersing assistant, titanium dioxide, and caprolactam which is processed by specific process steps as disclosed in Inventive Examples 1 and 2 and not for a generic composition comprising polymerized polycaprolactam and titanium dioxide as a generic method as presently claimed.

Claim Objections

9. Claim 18 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

10. Claim 18 recites the limitation “wherein an average mean pressure build-up of the polymerized product, determined as a difference between a final pressure and an initial pressure upstream during a filtration, divided by an amount put through a filter is about 7 bar/kg”.

However, it is noted claim 1 from which claim 18 ultimately depends from, already recites the particular limitation recited in claim 18.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Strehler et al (US 4,388,425).

Regarding claim 20, Strehler et al discloses polymerized polycaprolactam, commonly known in the art as a polyamide, i.e., Nylon 6, which contains titanium dioxide pigments, polymerized caprolactam (Column, Lines 31-35, and Column 2, Lines 35-68). Specifically, the reference disclose a processes where 275 kg of titanium dioxide, 68 kg of caprolactam 2060 kg of water (based on an initial amount of 60 kg and 2,000 Kg of water added after kneading) and 0.275 disodium phosphate are mixed to obtain titanium dioxide with an particle size of 0.2 to 0.9 microns (Column 2, Lines 35-52 - production step a). Based on the amounts of caprolactam, disodium phosphate, water, and titanium dioxide from production step (a) the total amount of ingredients is 2403.25 kg. Further the reference discloses production step (b) wherein 9,000 kg of the product obtained in step (a) in added to 2,200 kg of caprolactam, 350 kg of water (Column 2, Lines 53-68). Based on a scaling factor of 3.74 (determined at 9,000 kg from step (a) / 2403.26 kg weight determined from step (a)), the mixture comprises 2454 kg caprolactam, 1028.5 kg titanium dioxide and 1.0285 kg disodium phosphate. The reference discloses that during this process water comprises 6 wt % and is polymerized (Column 2, Lines 55-68). Based on the amount of titanium dioxide, or 61.71 kg water, from which it is determined that the mixture has a

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total weight of 3545.2 kg, or an amount of titanium dioxide of 29.0 wt %. Given that the reference discloses that the mixture contains water, and it polymerized, i.e. water is not removed. It is clear that the reference discloses a mixture of water, polymerized caprolactam, and titanium dioxide in the amounts presently claimed.

In light of the above, it is clear that Strehler et al anticipates the presently recited claims.

Claim Rejections - 35 USC § 103

13. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

14. Claims 1, 4, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wehr (US 4,879,120) in view of Seeger (US 5,540,499).

The rejection of claims 1, 4, and 7 is adequately set forth in paragraph 12 of the Office action mailed on 3/3/2009 and is incorporated here by reference.

15. Claims 2 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wehr (US 4,879,120) and Seeger (US 5,540,499) as applied to claim 1 above, and in view of Strehler et al (US 4,388,425).

The rejection is adequately set forth in paragraph 13 of the Office action mailed on 3/3/2009 and is incorporated here by reference.

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16. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wehr (US 4,879,120) and Seeger (US 5,540,499) as applied to claim 1 above, and in view of Belde et al (US 4,474,681).

The rejection is adequately set forth in paragraph 15 of the Office action mailed on 3/3/2009 and is incorporated here by reference.

17. Claims 5, 8-11, 13-18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wehr (US 4,879,120) and Seeger (US 5,540,499) as applied to claim 1 above, and in view of Strehler et al (US 4,388,425).

The rejection of claims 8-9 and 10-11 is adequately set forth in paragraph 14 of the Office action mailed on 3/3/2009 and is incorporated here by reference.

The discussion with respect to Wehr and Seeger as set forth in Paragraph 15 above is incorporated here by reference

Regarding claim 5, the combined disclosures of Wehr, Seeger, and Strehler et al teach all the claim limitations as set forth above.

The combined disclosures of Wehr and Seeger disclose all the claim limitations as set forth above. However, Wehr and Seeger do not disclose that the titanium dioxide pigment has a mean average particle size of less than 1.2 microns and comprises 1 to 50 wt % of the total product mixture as present recited in the claim.

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Strehler et al discloses polymerized polycaprolactam, commonly known in the art as a polyamide, i.e., Nylon 6, which contains titanium dioxide pigments (Column, Lines 31-35, and Column 2, Lines 35-68). Specifically, the reference discloses a process where 275 kg of titanium dioxide, 68 kg of caprolactam, 2060 kg of water (based on an initial amount of 60 kg and 2,000 Kg of water added after kneading) and 0.275 disodium phosphate are mixed to obtain titanium dioxide with a particle size of 0.2 to 0.9 microns (Column 2, Lines 35-52 - production step a). Based on the amounts of caprolactam, disodium phosphate, water, and titanium dioxide from production step (a) the total amount of ingredients is 2403.25 kg. Further the reference discloses production step (b) wherein 9,000 kg of the product obtained in step (a) is added to 2,200 kg of caprolactam, 350 kg of water (Column 2, Lines 53-68). Based on a scaling factor of 3.74 (determined at 9,000 kg from step (a) / 2403.26 kg weight determined from step (a)), the mixture comprises 2454 kg caprolactam, 1028.5 kg titanium dioxide and 1.0285 kg disodium phosphate. The reference discloses that during this process water comprises 6 wt % and is polymerized (Column 2, Lines 55-68). Based on the amount of titanium dioxide, or 61.71 kg water, from which it is determined that the mixture has a total weight of 3545.2 kg, or an amount of titanium dioxide of 29.0 wt %.

Regarding the particle size and amount of titanium dioxide disclosed by the reference, It is well settled that where the prior art describes the components of a claimed compound or compositions in concentrations within or overlapping the claimed concentrations a prima facie case of obviousness is established. See *In re Harris*, 409 F.3d 1339, 1343, 74 USPQ2d 1951, 1953 (Fed. Cir 2005); *In re Peterson*, 315 F.3d 1325, 1329, 65 USPQ 2d 1379, 1382 (Fed. Cir.

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1997); In re Woodruff, 919 F.2d 1575, 1578 16 USPQ2d 1934, 1936-37 (CCPA 1990); In re Malagari, 499 F.2d 1297, 1303, 182 USPQ 549, 553 (CCPA 1974).

Regarding claims 13-14, the combined disclosures of Wehr, Seeger, and Strehler et al teach all the claim limitations as set forth above. Wehr does not disclose a polyamide composition comprising from 5 to 45 wt % titanium dioxide recited in claim 13 and 8 to 40 wt % titanium dioxide recited in claim 14.

Strehler et al discloses polymerized polycaprolactam, commonly known in the art as a polyamide, i.e., Nylon 6, which contains titanium dioxide pigments, polymerized caprolactam (Column, Lines 31-35, and Column 2, Lines 35-68). Specifically, the reference disclose a processes where 275 kg of titanium dioxide, 68 kg of caprolactam 2060 kg of water (based on an initial amount of 60 kg and 2,000 kg of water added after kneading) and 0.275 disodium phosphate are mixed to obtain titanium dioxide with an particle size of 0.2 to 0.9 microns (Column 2, Lines 35-52 - production step a). Based on the amounts of caprolactam, disodium phosphate, water and titanium dioxide from production step (a) the total amount of ingredients is 2403.25 kg. Further the reference discloses production step (b) wherein 9,000 kg of the product obtained in step (a) in added to 2,200 kg of caprolactam, 350 kg of water (Column 2, Lines 53-68). Based on a scaling factor of 3.74 (determined at 9,000 kg from step (a) / 2403.26 kg weight determined from step (a)), the mixture comprises 2454 kg caprolactam, 1028.5 kg titanium dioxide and 1.0285 kg disodium phosphate. The reference discloses that during this process water comprises 6 wt % and is polymerized (Column 2, Lines 55-68). Based on the

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amount of titanium dioxide, or 61.71 kg water, from which it is determined that the mixture has a total weight of 3545.2 kg, or an amount of titanium dioxide of 29.0 wt %.

Regarding the amount of titanium dioxide disclosed by the reference, it is well settled that where the prior art describes the components of a claimed compound or compositions in concentrations within or overlapping the claimed concentrations a prima facie case of obviousness is established. See *In re Harris*, 409 F.3d 1339, 1343, 74 USPQ2d 1951, 1953 (Fed. Cir 2005); *In re Peterson*, 315 F.3d 1325, 1329, 65 USPQ 2d 1379, 1382 (Fed. Cir. 1997); *In re Woodruff*, 919 F.2d 1575, 1578 16 USPQ2d 1934, 1936-37 (CCPA 1990); *In re Malagari*, 499 F.2d 1297, 1303, 182 USPQ 549, 553 (CCPA 1974).

Regarding claims 15-16, the combined disclosures of Wehr, Seeger, and Strehler et al teach all the claim limitations as set forth above. However, Wehr does not disclose a dispersing agent and amounts thereof recited in the present claims.

Strehler et al teaches a process of forming concentrates of titanium dioxide comprising aqueous dispersions of caprolactam. Furthermore, the reference teaches the addition of a dispersion assistant such as disodium phosphate (Column 3, Lines 1-3 and Liens 55-68, dispersion assistant is disodium phosphate). The reference discloses that the dispersing agent, comprises up to 0.2 wt % of the composition (Column 1, Lines 55-68).

Given that the disclosures of Wehr and Strehler et al are drawn to analogous process of forming a dispersion of titanium dioxide, and given that Wehr does not explicitly prohibit other ingredients it would therefore have been obvious to one of ordinary skill in the art to include as

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doing so would amount to nothing more than use of known process for its intended use, in a known environment to accomplish entirely expected results.

Regarding the amount of dispersing assistant disclosed by the reference, it is well settled that where the prior art describes the components of a claimed compound or compositions in concentrations within or overlapping the claimed concentrations a prima facie case of obviousness is established. See *In re Harris*, 409 F.3d 1339, 1343, 74 USPQ2d 1951, 1953 (Fed. Cir 2005); *In re Peterson*, 315 F.3d 1325, 1329, 65 USPQ 2d 1379, 1382 (Fed. Cir. 1997); *In re Woodruff*, 919 F.2d 1575, 1578 16 USPQ2d 1934, 1936-37 (CCPA 1990); *In re Malagari*, 499 F.2d 1297, 1303, 182 USPQ 549, 553 (CCPA 1974).

Regarding claim 17, the combined the combined disclosures of Wehr, Seeger, and Strehler et al teach all the claim limitations as set forth above. However, Wehr does not disclose a mixture comprising 93.8 % water, 6.0 wt % caprolactam and 0.2 wt % dispersant.

Strehler et al teaches a process of forming concentrates of titanium dioxide comprising aqueous dispersions of caprolactam. Furthermore, the reference teaches the addition of a dispersion assistant such as disodium phosphate (Column 3, Lines 1-3 and Liens 55-68, dispersion assistant is disodium phosphate). The reference discloses that the dispersing agent, comprises up to 0.2 wt % of the composition (Column 1, Lines 55-68).

Given that the disclosures of Wehr and Strehler et al are drawn to analogous process of forming a dispersion of titanium dioxide , and given that Wehr does not explicitly prohibit other ingredients it would therefore have been obvious to one of ordinary skill in the art to include as

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doing so would amount to nothing more than use of known process for its intended use, in a known environment to accomplish entirely expected results.

Regarding the amounts of water, and caprolactam recited in the present claims, it is the Examiner's position that the amount of water, caprolactam are result effective variables because changing them will clearly affect the type of product obtained. See MPEP § 2144.05 (B). Case law holds that "discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art." See *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

In view of this, it would have been obvious to one of ordinary skill in the art to utilize appropriate amounts of water and caprolactam, including those within the scope of the present claims, so as to produce desired end results.

Regarding claim 18 the combined the combined disclosures of Wehr, Seeger, and Strehler et al teach all the claim limitations as set forth above. The references do not explicitly disclose a polyamide, wherein an average mean pressure build-up of the polymerized product determined as a difference between a final pressure and an initial pressure upstream during filtration, divided by an amount put through a filter is about 7 bar/kg. However, given that Wehr and Strehler teach a process for producing polyamides are presently claimed comprising water, caprolactam and titanium dioxide as presently claimed and Seeger discloses the identical apparatus as presently claimed, it is the Examiner's position that the polymerized product of is expected to have an average pressure build-up of about 7 bar/kg.

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Regarding claim 21, the combined disclosures of Wehr, Seeger, and Strehler et al teach all the claim limitations as set forth above. Additionally, Wehr teaches a process, wherein water is removed from the product mixture during the polymerization and additional caprolactam is added to the product mixture during the polymerization (Column 2, Lines 46-54 and Column 3, Lines 4-10 and Example 1, Lines 34-44).

18. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wehr (US 4,879,120), Seeger (US 5,540,499), and Strehler et al (US 4,388,425) as applied to claims 5, 8-11, 13-18, and 21 above, and in view of Lewis (see attached pages of *Hawley's Condensed Chemical Dictionary*).

Regarding claim 19, the combined disclosures of Wehr, Seeger, and Strehler teach all the claim limitations as set forth above. However, they do not teach a masterbatch for delustering or coloration of a polymer comprising the presently claimed polyamide.

Lewis discloses masterbatch as a previously prepared mixture comprising of a base material and a high percentage of ingredients or additives which is added to production-size quantities during mixing. As a result the masterbatch permits uniform distribution of these additives.

Given that Wehr, Seeger, and Strehler are drawn to compositions containing polymerized caprolactam, titanium dioxide and method of producing such compositions as well as coloring or delustering polyamide, and, in light of the particular advantages provided by a masterbatch as taught by Lewis, it would therefore have been obvious to one of ordinary skill in the art to utilize

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the disclosed caprolactam composition as a masterbatch for coloring or delustering nylon with a reasonable expectation of success.

Response to Arguments

19. Applicant's arguments filed 6/3/2009 have been fully considered but they are not persuasive.

20. Regarding applicant's arguments regarding the rejection of claims 1-2 in the previous Office Action under 35 U.S.C. 112 first paragraph, that the claim recites a process and not a composition. However, it is noted that the particular Examples in the Specification from which the presently recited limitation, i.e. "about 7 bar/kg", was obtained a by process comprising specific dispersing agents, water, and titanium dioxide, and amounts thereof. Furthermore, these examples recite specific process step limitations such as time and temperature which are not presently recited in the claims. While the applicant argues that possession of the invention is clearly show by the description of the process that includes all of the recited ranges for the components of the polymerized product made by the process. However, it is noted that the Specification clearly discloses that the pressure of "about 7 bar/kg" is obtained for a specific process, utilizing specific ingredients and amounts thereof. The Specification does not disclose that the pressure of "about 7 bar/kg" for all ranges as argued by Applicant but rather for specific amounts, i.e. single values within the ranges generally disclosed by the specification. The specification as a whole does not disclose that the pressure of "about 7 bar/kg" is obtained by a generic process using disclosed ranges of ingredients. Thus the Examiner's position remains that

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the previously set forth rejection of the claims is proper and is maintained in the rejections set forth above.

21. Applicant argues that the Examiner has not shown any motivation to modify Wehr with a reference that describes a machine for dispersing powders such as starch, bentonite, etc”.

However, it is noted that given that Seeger discloses particular advantages of the apparatus includes wetting of powder, or granular substance as well as distribution of particles or substances as other properties such as reduced clogging and advantages of the dispersion/mixing regions of the particular apparatus, it the Examiner’s position, absent evidence to the contrary, that it would have been obvious to one of ordinary skill in the art to modify the process taught by Wehr to include the mixing apparatus disclosed by Seeger with a reasonable expectation of success.

Further, it is noted that by Applicant's own admission Page 10, Lines 14-16 of the Specification discloses a preferred mixing apparatus utilized in the present invention which is identical to mixing apparatus disclosed by Seeger et al. Therefore it is not clear why Applicant argues that the apparatus disclosed by Seeger cannot be utilized in the present invention.

Clarification is request.

Finally, it is noted that while Seeger does not disclose all the features of the present claimed invention, the reference is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, namely the advantages

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of the particular mixing apparatus, and in combination with the primary reference, discloses the presently claimed invention. If the secondary reference contained all the features of the present claimed invention, it would be identical to the present claimed invention, and there would be no need for secondary references.

While the references do not disclose a build up pressure of "about 7 bar/kg" given that Wehr discloses a process containing caprolactam and titanium dioxide as presently claimed, and Seeger discloses the identical mixing apparatus as presently claimed, it is the Examiner's position remains, absent evidence to the contrary, that utilizing the mixing apparatus disclosed by Seeger in the process disclosed by Wehr will intrinsically result in a build up pressure of "about 7 bar/kg" as presently claimed.

22. Given the present amendments to claim 5 the previously set forth obviousness double patenting rejection set forth in the previous Office Action is withdrawn.

Conclusion

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEXANDER C. KOLLIAS whose telephone number is (571)-270-3869. The examiner can normally be reached on Monday-Friday, 8:00 AM -5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571)-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. C. K./

Examiner, Art Unit 1796

/Vasu Jagannathan/

Supervisory Patent Examiner, Art Unit 1796